



# CHOCK TALK

Newsletter of the Blue Sky Flying Club, est. 1957

## Stuck in the Sticks *By: Dennis Sullivan*

In September I flew the family to Northumberland Co Airport N79 in PA, just east of Selinsgrove. We went to visit Knoebles Amusement Park - not far from the airport. It's a rural area, but I'd done my homework and apparently two Uber-drivers worked nearby.

Well, the Uber-drivers weren't answering their phones so we lucked out when we met a local pilot named Brian who just happened to be stopping by his hangar. Brian was a super guy and offered to both drop us off and pick us up from the amusement park. What a deal!

After a great day at the park, right on time, Brian picked us up and delivered us to the plane. It was around 6pm and the clouds had lifted. I was eager to get airborne in the daylight; the area is mountainous with few places to put a plane down in an emergency.

Preflight complete; everyone belted in. "CLEAR!" I turn the key and ... CLUNK from the starter relay. I tried a couple more times and - nada ... the prop didn't even think about moving.

I called Tom to discuss the situation and decided on the phone that I was going to attempt to hand prop the plane. I had done it successfully once about twenty five years ago in a 172. At the time, I found it pretty scary. I'd had a trusted friend hold the brakes and he commented that he'd never seen anyone move as fast as I did when that engine started. More recently, I have some experience flying Piper Cubs, getting hand-propped, and I've been given a "down and dirty" lesson on that.

I've never heard of anyone hand propping a 182 and I really didn't even know if it could be done with a large six-cylinder Continental. By now, my buddy Brian was long-gone and the airport was deserted. So my wife was going to be an active participant in this process or we were going to be living in the airplane for a day or two... remember - we're in the STICKS. She has taken a "pilot partner" course and has a basic knowledge of how the controls work. I refreshed her on the toe brakes and throttle, and how to shut it down if anything "goes wrong". I set the parking brake, primed it, set the throttle, and was just about to undergo some real trust exercises with my wife when another pilot appeared and offered to help. I took him up on the offer.



My first two attempts - the prop just bounced back from the compression. Then I pulled the prop around to get the descending blade in a better position - around 10-11 o'clock. On the third try the engine fired right off. I swapped seats with the other pilot and we were on our way shortly after.

My daughter recorded video of the whole thing and upon reviewing it I realized I did some things right, but also did some things very wrong. Like everything in aviation - we learn from our

mistakes. The first mistake (and it was a big one) was leaving the mags hot while positioning the propeller into the starting position. This is a big no-no. Even though I was being cautious with my hands, and the brakes were being held firmly, the mags should have been OFF. I think I didn't really believe that big engine would ever start and I took a risk that I shouldn't have. Secondly it's a good idea to pull the prop around after priming to distribute the fuel mixture. This is not a safety violation but doing it may have made for an easier start. The third mistake was not turning the mags OFF again while re-positioning the prop after the failed attempts.

So in hindsight I should have taken a breath and slowed things down. As they say in aviation - "wind your watch". This would have been a better/safer method:

- |                    |  |
|--------------------|--|
| 1. Mags cold/OFF   | 5. Pull prop through 2-3 blades - fuel dist. |
| 2. Mixture - RICH  | 6. Set prop in 10-11 o'clock starting pos.   |
| 3. Throttle closed | 7. Mags hot/ ON                              |
| 4. Prime           | 8. Hand prop                                 |

What I did right: I did manage to use my body's momentum each time to move *back* away from the prop after each pull. I managed to retain both arms and all fingers. I got us all home - safe and sound.

## TBO - Time Between Overhaul

Hanging a new engine is expensive. Engine manufacturers recommend doing it at certain intervals - usually around 2,000 hours. Since it is a recommendation only, passionate arguments abound on either side of that decision. Blue Sky has adhered to an unwritten policy of replacing the engine at the first annual when the engine has reached TBO. By doing it simultaneously with the annual, we reduce down-time.

The Skyhawk gets its annual in February and will be at TBO. Fortunately, our engine reserve bucket will be full enough. (We've already made a downpayment to lock in the price.) But shopping for an engine recently has been a shock; the price increases are staggering... and are continuing, with supply chain and inflation being the two biggest reasons. And as a result, we've been forced to increase the hourly rates on 3DS and 58H so their buckets will be full when the time comes.

In the interest of cost savings the Board spent extensive time over two meetings, debating the wisdom and cost/benefits of going beyond TBO. Setting aside the potential liability argument, we focused solely on the money. What would we save if we went beyond TBO while implementing a new and rigorous oil analysis and borescope program?

With the assistance of a spreadsheet, carefully constructed by Mark, we were able to take into account current engine reserve budgeting and future engine cost increases based on two different adjustable inflation rates - one for parts and one for labor. And we factored in the additional costs of periodic oil analysis and borescopes. Now we could closely analyze the costs to the club.

Primarily due to two factors, our investigation revealed that there was extremely little to be gained by going beyond TBO. The factors: engine changes concurrent with annuals, and



**TBO** (continued) engine reserve accrual being based on an estimated fixed (non-inflating) cost. So, nearing TBO, our bucket is full and we can afford a replacement. But after that point when engine prices inflate and the the cost of additional analysis kicks in, these additional costs negate the savings because the costs were not built into the accrual rate, thus forcing further increased hourly rates – something that neither the Board nor the Club would be pleased with.



**Winter's here.** [This page on our website](#) has links to our pre-heater use and Operating Instructions. [This page](#) has a link to a Powerpoint on winter

**Welcome!** Blue Sky welcomes new member Cal Swedberg of Hillsborough. Cal is a retired US Navy Flight Officer (Navigator) with over 2,000 hours in C-130, P-3, and B-707. He holds a PPL and did most of his training in Texas and North Carolina.



**Treat it like it's your own (it is).** In my previous career, we often picked up an airplane after another crew. When you walked into the cockpit and found the last crew's debris (flight plan, food wrappers plastic cups etc), it would always lead to a verbal trashing, "*What freaking slobs!*". Dallas crews had the worst reputation and, on occasion, we'd gather up all the Dallas crew's garbage, put it in a board mail folder and mail it to them with a love note. (Their names were printed right there on the flight plan.)



7 pilot's trash recently removed

Don't worry, we'll never resort to that at Blue Sky but we all need to think of our airplanes like they are our personal airplanes. Don't leave items behind: fuel receipts, personal items, empty oil cans, used oil rags. Sure it's a nuisance to put it in your car or find a trash can, but it's even more of a nuisance for the next pilot who didn't leave it there!

### **NEWS YOU CAN USE** **Next Membership Meeting**

Monday, December 5, 7:30 p.m.  
Calvary Baptist Church

Safety Presentation: **Emergencies**, Tom Halvorson

**Fuel Prices** (ranked in order of price)  
**(It helps your club when you buy it cheap!)**

Central Jersey	\$5.60
Sky Manor	\$5.60
Solberg	\$6.04. (Must use the Phillips card)

**It's your money! Use it wisely!**